

**ABSTRACT OF THE INVENTION**

The present invention relates to a cardio myopeptidin which is isolated from the hearts of non-human healthy mammals. The molecular weight of the cardio myopeptidin is less than 10000 Dalton, the peptide content thereof being 75%~90%, the free amino acid content 6% ~ 15%, the ribonucleic acid content less than 2%, and the deoxyribonucleic acid content less than 7.5%. The present invention further provides a method of producing the cardio myopeptidin and the use thereof in producing pharmaceuticals for treating cardiac disorders, specifically the use in producing pharmaceuticals for treating myocardial ischemic and reperfusion injury. The cardio myopeptidin of the present invention can work directly on myocytes, promoting the repair of injuries caused by various reasons, and providing a new way to relieve ischemic and reperfusion injury, and to promote the repair of injured myocardium.